

# Family Information Form-Template



Go toCBI &  
Diagnostics  
Page

Manufacturer:

Engine category:

Cert contact:

1. Model Year:	2011
2. Carry over:	
If yes, list the previous family:	
3. Process Code:	Blue Submission
Date EPA Fee Paid:	2/11/2011
4. EPA Standard Engine Family:	BNXH07570GD
5. Mfr's Family Name:	Maxxforce 13
6. Engine Cycle:	Diesel
7. Displacement(s) (CID or Liters)	757cid
8. Engine Configuration:	I-6

Use the following format:V-8 or I-6

9. Emission Control &  
Aftertreatment:

<input checked="" type="checkbox"/> Electronic control	<input type="checkbox"/> Lean NOx
<input type="checkbox"/> Engine Modification	<input type="checkbox"/> SCR
<input type="checkbox"/> 3WCatalyst	<input checked="" type="checkbox"/> DOC
<input type="checkbox"/> Smoke puff limiter	<input type="checkbox"/> None
<input type="checkbox"/> Passive DPF	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Active DPF	
<input checked="" type="checkbox"/> EGR	
<input type="checkbox"/> NOx adsorber	

Check all that apply

If Other Describe:

10. Fuel Type:	Diesel
11. Fuel System Type:	Electronic Direct Injection
12. Method Of Aspiration:	Two Stage Turbo
Turbocharger Type	VGT
Aftercooling	Air to Water

13 Useful Life Period:	10 yrs / 435,000 mi / 22,000hrs
14. Deterioration Factor Type	
A. Gaseous Exhaust:	Multiplicative
B. Smoke:	NA

15. Intended Service Class	HHDD
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## Applicable Regulations

- ☐ Part 89  
☐ Part 1039  
☐ Part 60 only certified to requirements of Part 1039  
☐ Part 60 only certified to requirements of Part 89  
☐ Part 60 and Part 1039  
☒ Part 60 and Part 89
- } Nonroad CI  
 } Stationary only  
 } Stationary-Nonroad CI

19. Plant Contact:

EPA (b) (4) CBI

EPA (b) (4) CBI

20. Plant Location:

EPA (b) (4) CBI

21. ABT Information:

Check all that apply

<input type="checkbox"/> In the split family program	<input type="checkbox"/> NMHC+NOx
<input type="checkbox"/> PM	<input type="checkbox"/> NA
<input type="checkbox"/> NOx	

22. Family Emission Limits:

PM	
NOx	0.2
NMHC + NOx	
Units:	g/bHp-hr

23. Nonroad Engine Equipment Types:

<input type="checkbox"/> Crane	<input type="checkbox"/> Dozer	<input type="checkbox"/> Generator Set
<input type="checkbox"/> Loaders	<input type="checkbox"/> Pump	<input type="checkbox"/> NA
<input type="checkbox"/> Tractor	<input type="checkbox"/> Compressor	<input type="checkbox"/> Other...

**Note: New or modified fields for the 2007 MY on-hwy certification**

**Note: New or modified fields for stationary engines and new reg. parts 60/1039 are in**

**New change explanation**

If CFF, Select which category:

16. Projected Sales :

FED

EPA (b) (4) CBI

CA

TOTAL

EPA (b) (4) CBI

17. Estimated

Start

EPA (b) (4) CBI

Production Period:

End

EPA (b) (4) CBI

18. Sales Area:

☒

Fed

☐

Cal

☐

50 St

24. Auxiliary Emission Control Devices:

Reduces effectiveness of  
emission control?

AECD

Sensed

PARAMETER

Controlled

VMT

TONS/ENGINE

See attached document

☐ Yes

☐ Yes

☐ Yes

☐ Yes

☐ Yes

☐ Yes

☐ Yes

☐ Yes

☐ Yes

☐ Yes

Examples of AECDs:

Engine Starting

Warm up

White Smoke

Extended Idle

Condensation

Acceleration

Altitude

Air Handling

Over heat

PTO

Regen Strategies

25. Adjustable Parameters:

Parameter

Adjustable Range (or N/a)

Tamper Resistance Method (or N/a)

None

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26. OBD

OBD Approval date:

OBD Approval Method:

Examples: letter from EPA , verbal from EPA, E.O. covers it

27. Maintenance Interval

Alternate Maintenance Int.? ☐ Yes

If yes, describe

28. Is this engine family using the Delegated Assembly flexibility described in 85.1713?

☐ Yes ☒ No

If yes, attach plan in a container field on technical description page

29. Comments:

EPA (b) (4) CBI

Note: If the comment text box is too big you can adjust the box by going to View Layout Mode you can move the box around by grabbing the corner of the box . to the Browse Mode for data entry. Be easily be done in the Layout Mode.

Written submission contains AECD information and is **CBI indefinitely**.

NOTE: UAFs are not included as data shows insignificant difference between the EFI and EFh.

[Item 16] of the [Supplemental Test] tab does not include modal data since the ramped-modal cycle (RMC) version of the USSET was utilized.



## Test Information Form

Manufacturer: **Navistar Inc.**

Engine category: **On-highway HDDE**

Cert contact: **Ade Adekanmbi**

1. EPA Standard Engine Family: **BNXH07570GD**

2. Process Code: **New Submission**

3. Test Data Set: **1**

4. Engine Code: **B475**

5. Engine Model: **B475**

6. Displacement(s)  
(cid Or Liters): **757cid**

7. Engine I.d. Number: **RD7047**

8. Rated **HP** @ **475**

Rated **RPM**: **1700**

9. Torque (**ft-lb**) @ **1560**

Engine **RPM**: **1600**

10. WAIVERS: **CO** **PM** **Smoke** **Idle Co**

**NA** **NA** **NA**

11. Cold Start? **No**

12. Certification Fuel: **Diesel(Part 86.1313-2007(b)-(2)TableN07-2**

13. Special Test Device **No**

14 Test Procedure: **On-Hwy Diesel**

### 15. Crankcase emissions (CCEs)

- ☒ CCEs routed into the air inlet system  
☐ CCEs routed into the exhaust upstream of aftertreatment  
☐ CCEs measured separately from exhaust emissions.

If the CCEs are measured separately list them in the tech. description (item 13) and account for them in the test results listed below.

### 16. Official Test Results Date: **2/11/2011**

#### DFs

HC/OMHCE

NMHC/OMNMHCE

HC + NOx

CARBON MONOXIDE

OXIDE OF NITROGEN

PARTICULATE

FORMALDEHYDE

ACCELERATION (%opacity)

LUGGING (Gen) (%opacity)

PEAK (%opacity)

IDLE CO %

CO2

Test 1	Test 2	Test 3
<b>0.01</b>		
<b>0.30</b>		
<b>0.20</b>		
<b>0.001</b>		

**3.474**

**1.000**

**1.000**

**6.167**

NOx Adsorber, etc

**DPF**

Strategy

17. Adjustment Factors

	EFL	EFH	UAF	DAF
HC/OMHCE				
CARBON MONOXIDE				
OXIDE OF NITROGEN				
PARTICULATE				
Frequency Factor	N/A			

	EFL	EFH	UAF	DAF
Frequency Factor	N/A			

18. Certification Levels  
(Rounded Test Results)

	Units--	g/bHp-hr	--Units	STDs	FELs
				g/BHP-hr	g/kW-hr
HC/OMHCE					
NMHC/OMNMHCE		0.0			
NMHC + NOx					
CARBON MONOXIDE		0.3			
OXIDE OF NITROGEN		0.2			0.2
PARTICULATE		0.01			
FORMALDEHYDE					
ACCELERATION (%opacity)					
LUGGING (Gen) (%opacity)					
PEAK (%opacity)					
IDLE CO%					

# Supplemental Test Information Form

Manufacturer: **Navistar Inc.**  
Engine category: **On-highway HDDE**

1. EPA Engine Family:

BNXH07570GD

2. Process Code:

New Submission

3. Test Data Set:

1

4. Engine Code:

B475

5. Engine Model:

B475

6. Displacement(s)  
(cid Or Liters):

757 cid

7. Engine I.d. Number:

RD7047

8. Rated HP @

475

@

Rated RPM:

1700

9. Torque (ft-lb) @

1560

@

Engine RPM:

1600

10. WAIVERS:

CO

PM

Smoke

NA

NA

NA

11. Cold Start?

No

12. Certification Fuel:

Diesel(Part 86.1313-2007(b)-(2)TableN07-2

13. Special Test Device

No

14. Test Procedure:

Supplemental Euro III

15. Supplemental Euro III Test Information

Test Date:

2/11/2011

A Speed:

1484

(RPM)

A Speed Max Torque:

1313

(ft-lbs)

N<sub>lo</sub> Speed:

1323

(RPM)

B Speed:

1644

(RPM)

B Speed Max Torque:

1509

(ft-lbs)

N<sub>hi</sub> Speed:

1968

(RPM)

C Speed:

1805

(RPM)

C Speed Max Torque:

1271

(ft-lbs)

Mystery Points

% Speed

% Load

16. Supplemental Euro III Modal Results (g/bhp-hr):

	ESC Test Point													Myst 1	Myst 2	Myst 3
	1	2	3	4	5	6	7	8	9	10	11	12	13			
HC/OMHCE																
NMHC/OMNMHCE																
HC + NOx																
CO																
NOx																
Formaldehyde																
RPM																
Torque (ft - lbs)																

17. Adjustment Factors

DPF

Strategy

NOx Adsorber, etc

EFL

EFH

UAF

DAF

EFL

EFH

UAF

DAF

HC/OMHCE  
CARBON MONOXIDE  
OXIDE OF NITROGEN  
PARTICULATE


Frequency Factor


Frequency Factor

18. Weighted Composite Results (g/bhp-hr):

HC/OMHCE	
NMHC/OMNMHCE	0.01
HC + NOx	
CO	0.02
NOx	0.20
Formaldehyde	
PM (Composite only)	0.000

19. Deterioration Factors:

3.474
1.000
1.000
6.167

=

20. Certification Levels (g/bhp-hr):

0.0	
0.0	
0.0	
0.00	
	Limits

DF Type:

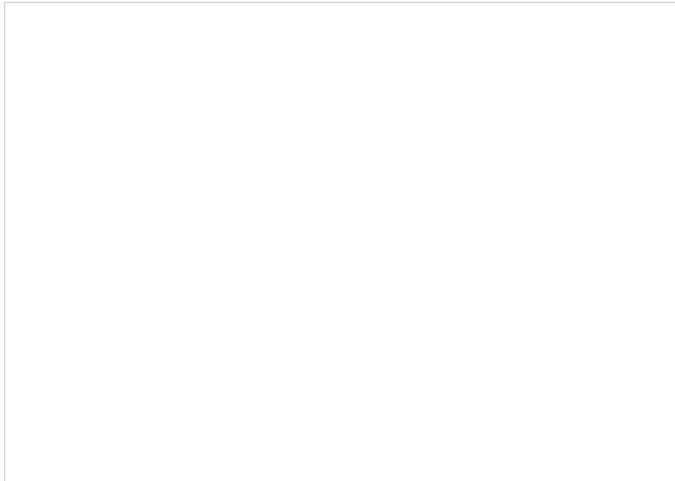
21. Transient Load Response Limit Results (g/bhp-hr):

	HC	NOx	PM	Beginning Load (ft-lbs)	Sample Interval Length
Lowest NTE Speed					
15% ESC Speed					
25% ESC Speed					
50% ESC Speed					
75% ESC Speed					
100% ESC Speed					

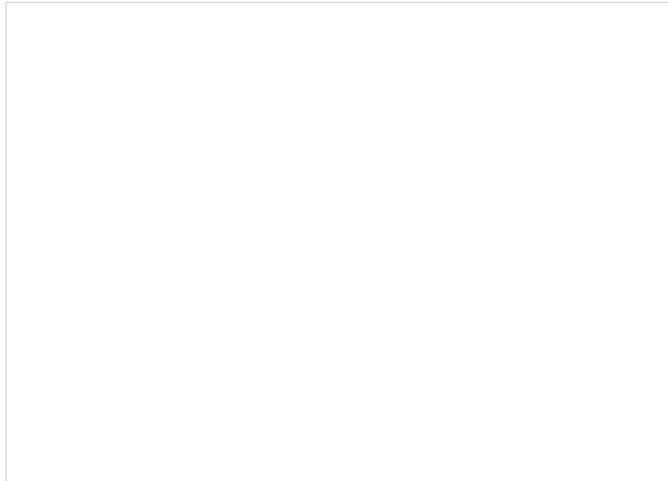
# Technical Description Form 1

Manufacturer: **Navistar Inc.**  
Engine category: **On-highway HDDE**  
EPA Engine Family: **BNXH07570GD**  
Mfr Family Name: **MAXXFORCE 13**  
Process Code: **New Submission**

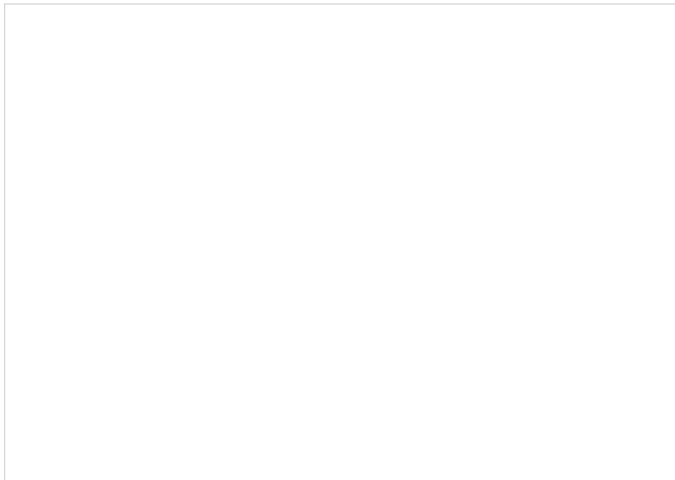
1. Diagrams/ Drawings/Schematics:



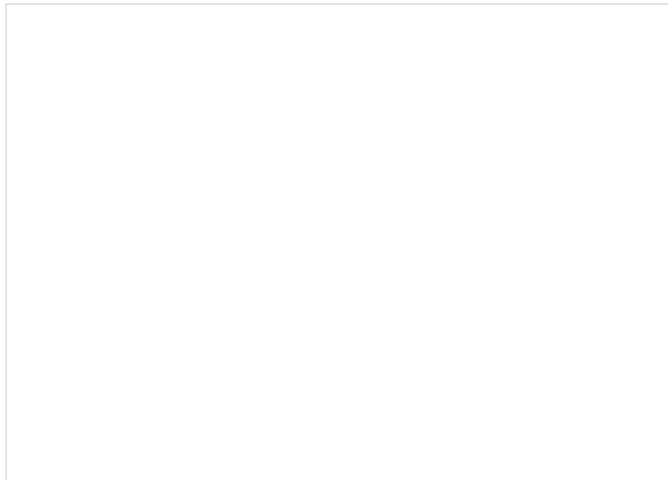
2. Diagrams/ Drawings/Schematics:



3. Diagrams/ Drawings/Schematics:



4. Diagrams/ Drawings/Schematics:



5. Diagrams/ Drawings/Schematics:

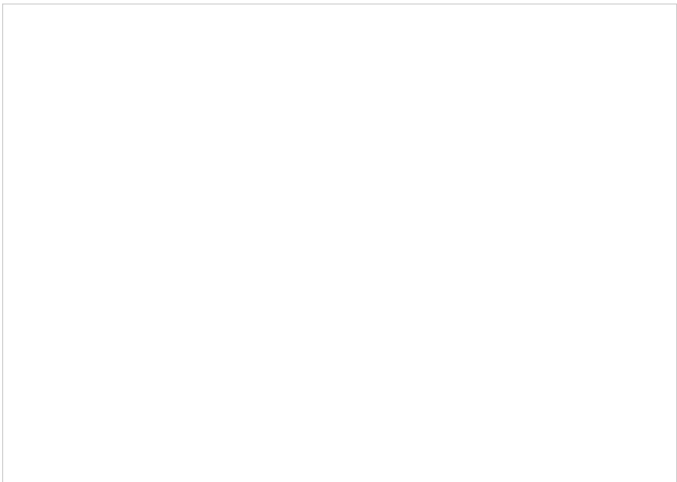


6. Diagrams/ Drawings/Schematics:

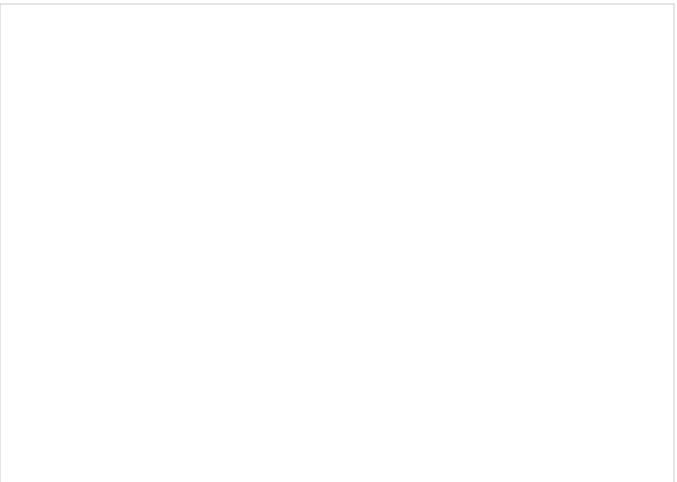




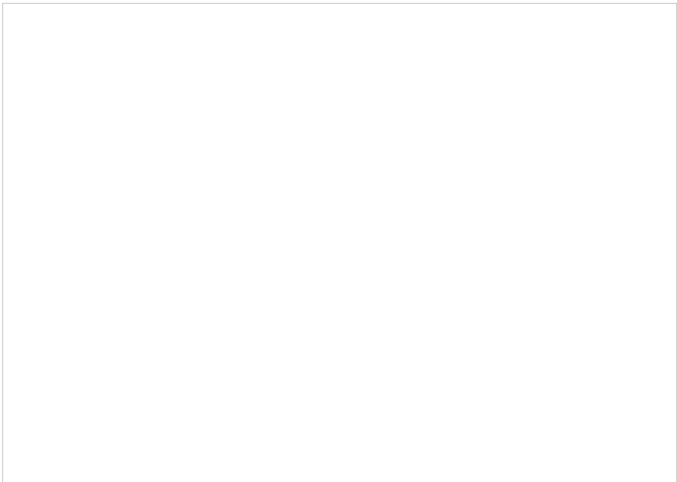
7. Diagrams/ Drawings/Schematics:



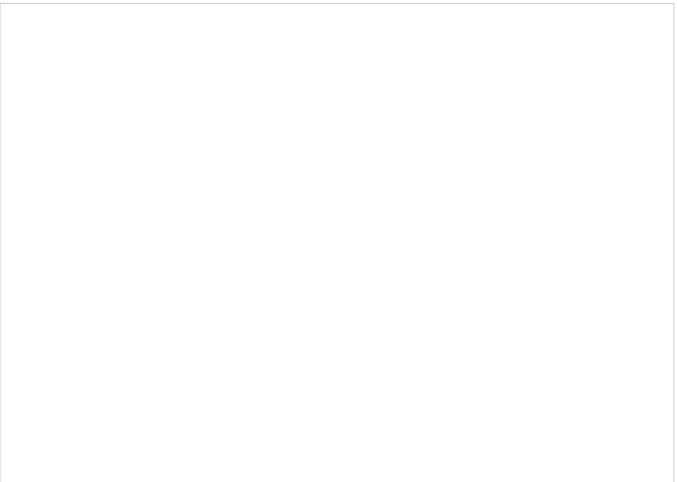
8. Diagrams/ Drawings/Schematics:



9. Diagrams/ Drawings/Schematics:

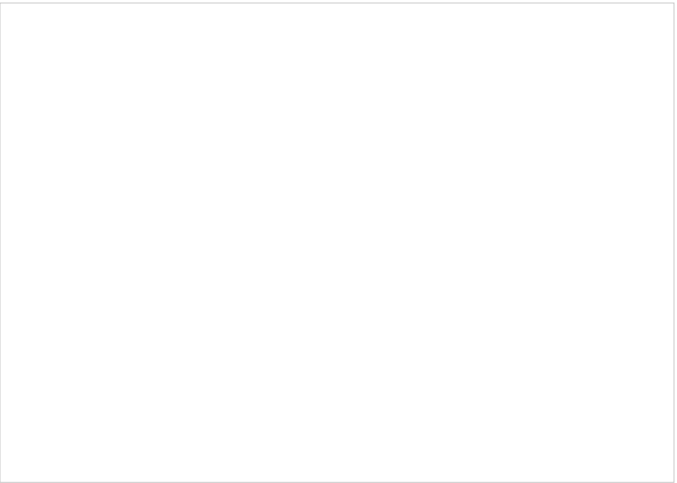
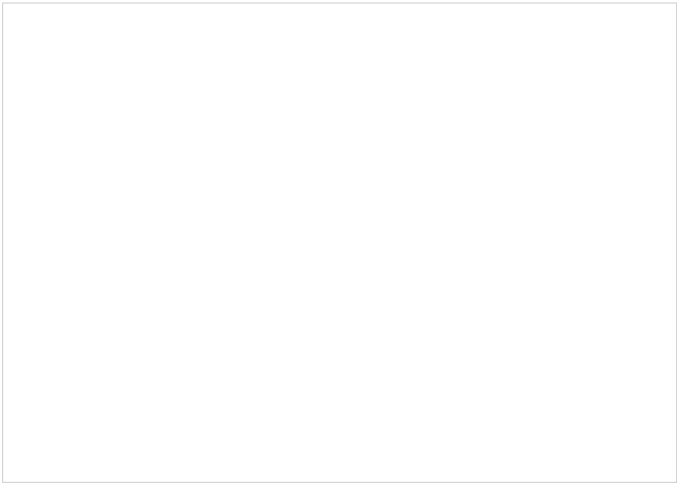


10. Diagrams/ Drawings/Schematics:



11. Diagrams/ Drawings/Schematics:

12. Diagrams/ Drawings/Schematics:



13. Crankcase emission measured separately

	Test 1	Test 2	Test 3
HC/OMHCE			
NMHC/OMNMHCE			
HC + NOx			
CARBON MONOXIDE			
OXIDE OF NITROGEN			
PARTICULATE			
FORMALDEHYDE			
ACCELERATION (%opacity)			
LUGGING (Gen) (%opacity)			
PEAK (%opacity)			
IDLE CO %			

CO2

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Technical Description Form 2

Manufacturer: Navistar Inc.  
Engine category: On-highway HDDE  
EPA Engine Family: BNXH07570GD  
Mfr Family Name: MAXXFORCE 13  
Process Code: New Submission

14. Technical Description:

Note: If the technical description text box is too small, you can adjust the box by going to View > Layout Mode you can move the box by grabbing the corner of the box to the Browse Mode for data entry. This can easily be done in the Layout Mode.

## Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
BNVXH07570GD	B475	B475	475@1700	288	164	1560@1600	297	159	DI, ECM, TC
CAC, EGR, OC									
PTOX									

Part Number Summary Template

Engine Family	Engine G-Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic	After Treatment	Smoke Puff	Sensor Assemblies	
						Control Module	Device (Specify)	Limiter	Description	Part Number
BNVXH07570GD	B475	B475	3005275C1	3014103X91	T0210012951	3008708X1	DPF+DOC		Cam Shaft	62271207038
BNVXH07570GD					3008565X91	ECM-5554-112 -0904-xD	3860631C93		Fuel Rail psi	3008327X1
BNVXH07570GD						AirpathVGT_INC Av62_Release_2 5Jan2011_RD70 47_Cell26_CertC al_11Feb2011	PREDOC		Oil Temp	62274210190
BNVXH07570GD						M131SSM_E346 SK01_NoRegen _ALT_JGS_0915 10_RD7047_Cell 26_CertCal 11F	3006598C1		Coolant Temp	62274210190
BNVXH07570GD									Manifold Temp	62274210165
BNVXH07570GD									Amb. air temp	3561562C1

## Part Number Summary Template

Engine Family	Engine	Engine	Injection Pump	Injector	Turbo Charge	Electronic	After Treatment	Smoke Puff	Sensor Assemblies	
	G-Code	Model				Control Module	Device (Specify)	Limiter	Description	Part Number
BNVXH07570GD									Doser Fuel psi	3006082C1
BNVXH07570GD									DPF Delta psi	3626432C1
BNVXH07570GD									Lambda	3006233C1
BNVXH07570GD									Boost psi,	1846481C92
BNVXH07570GD									Crank Shaft	62271207038
BNVXH07570GD									Exhaust Gas Temp	3006419C1 3006420C1 1870825C1

Part Number Summary Template

Engine Family	Engine G-Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic Control Module	After Treatment Device (Specify)	Smoke Puff Limiter	Sensor Assemblies	
									Description	Part Number
BNVXH07570GD									Humidity	3006679C91
BNVXH07570GD									Mixer Pressure	1846480C2
BNVXH07570GD									Mixer Temperature	1846481C92
BNVXH07570GD									Exhaust Pressure	1846480C2
BNVXH07570GD									Turbo Pressure Out	1846481C92
BNVXH07570GD									EGR Out Temperature	1870825C1

Part Number Summary Template

Engine Family	Engine	Engine	Injection Pump	Injector	Turbo Charge	Electronic	After Treatment	Smoke Puff	<u>Sensor Assemblies</u>			
	G-Code	Model				Control			Device (Specify)	Limiter	Description	Part Number
						Module						
BNVXH07570GD									EGR Out Pressure	1846480C2		



Part Number Summary Template 2

Engine Family	Engine Code	Engine Model	Miscellaneous Part Names and Numbers					
			Part Name	Part Number	Part Name	Part Number	Part Name	Part Number
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								

Part Number Summary Template 2

Engine Family	Engine Code	Engine Model	Miscellaneous Part Names and Numbers					
			Part Name	Part Number	Part Name	Part Number	Part Name	Part Number
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								
BNVXH07570GD								

## Part Number Summary Template 2

## Miscellaneous Part Names and Numbers

[illegible]



Part Number Summary Template 3

Engine Family	Engine Code	Engine Model	Miscellaneous Part Names and Numbers							
			Part Name	Part Number	Part Name	Part Number	Part Name	Part Number	Part Name	Part Number
BNVXH07570GD										
BNVXH07570GD										
BNVXH07570GD										
BNVXH07570GD										
BNVXH07570GD										
BNVXH07570GD										
BNVXH07570GD										
BNVXH07570GD										

Part Number Summary Template 3

Engine Family	Engine Code	Engine Model	Miscellaneous Part Names and Numbers							
			Part Name	Part Number	Part Name	Part Number	Part Name	Part Number	Part Name	Part Number
BNVXH07570GD										

# Statement of Compliance

On-highway HDDE

February 18, 2011

Certification Team Leader  
Engine Compliance Programs Group  
U.S. Environmental Protection Agency  
Mail Code: 6405-J  
Washington, DC 20460

Dear Certification Team Leader:

Please find enclosed the model year <XXXX> application for engine family <XXXXXXXXXXXX>. On behalf of the <XY Engine Company>, I hereby certify that the test engine(s), as described in this application for certification, has been tested in accordance with the applicable test procedures, utilizing the fuels and equipment required under subparts<XXXXXXXXXX>, and that on the basis of such tests the engine(s) conforms to the requirements of <XXXXXX>. I further certify that all engines in this engine family are in all material respects as described in the Application for Certification and comply with all requirements of <XXXXXX> and the Clean Air Act.

Sincerely,

Manufacturer: **Navistar Inc.**  
Engine category: **On-highway HDDE**  
EPA Engine Family: **BNXH07570GD**  
Mfr Family Name: **MAXXFORCE 13**  
Process Code: **New Submission**

**Address Form**

Each field on this form must be filled in.

<div>EPA (b) (4) CBI</div> <input type="text"/>	<div>EPA</div> <input type="text"/>	<div>EPA (b) (4) CBI</div> <input type="text"/>
FIRST NAME	INITIAL	LAST NAME
<div>EPA (b) (4) CBI</div> <input type="text"/>	<div>EPA (b) (4) CBI</div> <input type="text"/>	<input type="text"/>
TITLE	DIVISION	
<div>Navistar Inc</div> <input type="text"/>	<input type="text"/>	
COMPANY NAME	PO BOX	
<div>EPA (b) (4) CBI</div> <input type="text"/>		
ADDRESS		
<div>EPA (b) (4) CBI</div> <input type="text"/>	<div>EPA</div> <input type="text"/>	<input type="text"/>
CITY	STATE	COUNTRY
<div>EPA (b) (4) CBI</div> <input type="text"/>	<div>EPA (b) (6) Personal Info</div> <input type="text"/>	<input type="text"/>
ZIP	E-MAIL	BEEPER (OPTIONAL)
<div>EPA (b) (6) Personal Info</div> <input type="text"/>	<div>EPA (b) (6) Personal Info</div> <input type="text"/>	
PHONE	FAX	

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GENERAL COMMENTS